

What is claimed is:

1. A mixing device for use with a high pressure liquid jet system comprised of an enclosed housing defining an enclosed chamber having an inlet port and an outlet port, which outlet port is opposite to said inlet port and substantially on the same longitudinal axis as said inlet port and which inlet port contains an upper edge and a lower edge and which outlet port contains an upper edge and a lower edge, which housing contains an injector sealing connected thereto at a position that at substantially a 90° angle to said longitudinal axis and which is substantially equidistant between said inlet port and said outlet port, said injector comprising an internal bore that ends at a discharge outlet that can be directed along a horizontal plane within a space defined by a first substantially horizontal line being drawn from the upper edge of said inlet port and said upper edge of said outlet port and a second substantially horizontal line being drawn from the lower edge of said inlet port and said lower edge of said outlet port.

2. The mixing device of claim 1 wherein the injector can be rotated 360° within said horizontal plane.

3. The mixing device of claim 1 which is comprised of stainless steel.

4. A high pressure fluid spraying apparatus comprised of:

a first high pressure pump having an inlet connectable to a source of carrier liquid to receive carrier liquid therefrom;

a power source for driving said first high pressure pump;

a first high pressure regulator connected to said first high pressure pump to receive carrier liquid therefrom at high pressure and to deliver said high pressure liquid at a controlled pressure;

a container for containing an additive;

a second high pressure pump having an inlet connected to a said container to receive additive therefrom;

a power source for driving said second high pressure pump;

a mixing device comprised of an enclosed housing defining a chamber having an inlet port and an outlet port, which inlet port is fluidly connected to said first regulator for receiving high pressure carrier liquid, and which outlet port is opposite to said inlet port and substantially on the same longitudinal axis as said inlet port and which inlet port contains an upper edge and a lower edge and which outlet port contains an upper edge and a lower edge, which housing further contains an injector sealing connected thereto at a position that at substantially a 90° angle to said longitudinal axis and which is substantially equidistant between said inlet port and said outlet port, said injector comprising an internal bore that ends at a discharge outlet that can be directed along a horizontal plane within between a space defined by a first substantially horizontal line being drawn from the upper edge of said inlet port and said upper edge of said outlet port and a second substantially horizontal line being drawn from the lower edge of said inlet port and said lower edge of said outlet port, and which injector also contains a inlet being fluidly connected to said outlet of said second pressure pump for receiving high pressure additive; and

a wand having an inlet and an outlet wherein said inlet is connected to said outlet port of said mixing device for receiving a high pressure mixture of additive and carrier liquid and spraying it out of the outlet of said wand.

5. The apparatus of claim 4 wherein each high pressure pump is driven by a separate power source.

6. The apparatus of claim 4 wherein each high pressure pump is driven by the same power source.